# BUREAU OF INDIAN STANDARDS DRAFT FOR COMMENTS ONLY

Not to be reproduced without permission of BIS or use as Standard

Doc No.: PGD 39 (23507) IS 5920 (Part 7) : 2023 ISO 10110-11 : 2016 November 2023

## भारतीय मानक मसौदा

# प्रकाशिकी और फोटोनिक्स – ऑप्टिकल तत्वों और प्रणालियों के लिए आरेखण तैयार करना भाग 7 गैर-सहनीय डेटा

## Draft Indian Standard

Optics and Photonics — Preparation of Drawings for Optical Elements and Systems Part 7 Non-Toleranced Data

ICS 01.100.20; 37.020

### **Optics and Photonics, PGD 39**

### NATIONAL FOREWORD

This draft Indian Standard (Part 7) which is identical with ISO 10110-11 : 2017 'Optics and photonics — Preparation of drawings for optical elements and systems — Part 11: Non-Toleranced data' issued by the International Organization for Standardization (ISO) will be adopted by the Bureau of Indian Standards on the recommendation of the Optics and Photonics Sectional Committee and approval of the Production and General Engineering Division Council.

This standard specifies the presentation of design and functional requirements for optical elements and systems in technical drawings used for manufacturing and inspection. This document also specifies the permissible deviations and material imperfections when these are not explicitly indicated.

This standard has been published in thirteen parts. Part 1 of this series supersedes the originally published Indian Standard IS 5920 : 1970 'Recommendation for the preparation of drawing for optical elements and system'. Other parts in this series are:

- Part 1 General
- Part 2 Surface form tolerances
- Part 3 Centring tolerances
- Part 4 Surface imperfections
- Part 5 Surface texture
- Part 6 Surface treatment and coating

- Part 8 Aspheric surfaces
- Part 9 Wavefront deformation tolerance
- Part 10 Diffractive surfaces
- Part 11 Laser irradiation damage threshold
- Part 12 Stress birefringence, bubbles and inclusions, homogeneity, and striae
- Part 13 General description of surfaces and components

The text of ISO standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the currentpractice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

International Standard	Corresponding Indian Standard	Degree of Equivalence
ISO 10110-5 : Optics and	IS 5920 (Part 2) : XXXX/ISO 10110-	Identical
photonics — Preparation of	5 : 2015 Optics and photonics —	
drawings for optical elements	Preparation of drawings for optical	
and systems — Part 5: Surface	elements and systems : Part 5 Surface	
form tolerance	form tolerance	
ISO 10110-6 : Optics and	IS 5920 (Part 3) : XXXX/ISO 10110-	Identical
photonics — Preparation of	6 : 2015 Optics and photonics —	
drawings for optical elements	Preparation of drawings for optical	
and systems — Part 6 :	elements and systems : Part 6	
Centring tolerance	Centring tolerances	
ISO 10110-7 : Optics and	IS 5920 (Part 4) : XXXX/ ISO	Identical
photonics — Preparation of	10110-7 : 2017 Optics and photonics	
drawings for optical elements	— Preparation of drawings for	
and systems — Part 7 : Surface	optical elements and systems : Part 7	
imperfection	Surface imperfection	
ISO 10110-8 : Optics and	IS 5920 (Part 5) : XXXX/ ISO	Identical
photonics — Preparation of	10110-8 : 2019 Optics and photonics	
drawings for optical elements	— Preparation of drawings for	
and systems — Part 8 : Surface	optical elements and systems : Part 8	
texture	Surface texture	

**NOTE**: The technical content of draft standard is not available on website. For details, please refer to ISO 10110-11 : 2023 or contact:

Head Production and General Engineering Department Bureau of Indian Standards 9 Bahadur Shah Zafar Marg New Delhi-110002 Email: pgd@bis.org.in Telefax:011-23234819